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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/509,596

Filing Date: September 29, 2004

Appellant(s): YOSHIMURA ET AL.

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Joseph Ruch  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 5/11/2009 (and corrected on 6/26/2009) appealing from the Office action mailed 4/10/2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,430,348	ASANO	8-2002
4,419,479	SPRINGER	12-1983
2002/0016117	HAMAJIMA	2-2002
WO9846815	ASANO	10-1998

### **(9) Grounds of Rejection**

The following grounds of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 102/103***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-5, 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 98/46815 (PCT/JP98/01667) to Asano (USPN 6,430,348 cited as translation of PCT/JP98/01667).

Regarding claims 1, 3-5, 8 and 9, Asano discloses an identifying marker attached as an identification target to a product or service, the identifying marker being characterized in that at least a portion of said identification target is formed by a planar arranged optical interference fibers being aligned parallel to a lengthwise direction, where each of the optical interference fibers comprises an alternate laminated body obtained by laminating layers of polymers with different refractive indexes in an alternating fashion (see entire document including Figures 1-6, column 2, lines 45-54, column 28, lines 10-26, column 32, lines 44-68, and column 35, lines 17-25). Asano discloses that the fibers may be in a woven (comprises fibers aligned in parallel to a

lengthwise direction) fabric construction (column 22, lines 14-21, column 25, lines 29-36, and column 26, lines 1-45).

Asano does not appear to mention P polarized light or S polarized light, but considering that the identifying marker disclosed by Asano is identical to the claimed identifying marker, the identifying maker is inherently capable of being identified by P polarized light and S polarized light where the P polarized light and S polarized light are observed using a polarized plate for measurement of a wavelength and intensity curve of polarizing light passing through a slit of the polarizing plate oriented in the lengthwise direction of one of the optical interference fibers and a direction perpendicular thereto.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on *prima facie* obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

In the event that it is shown that Asano does not disclose the claimed invention with sufficient specificity, the invention is obvious because Asano discloses that claimed constituents (such as a substrate and a nonwoven fibrous body made of the claimed optical interference fibers) and discloses that they may be used together. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the claimed composite motivated by the expectation of successfully practicing the invention of Asano.

Regarding claim 3, Asano discloses that the layer thickness may be 0.02-0.3 micrometers for each layer of said alternate laminated body, and the count of layers may be 5-120 layers (see the paragraph bridging columns 3 and 4, and column 6, lines 26-41).

Regarding claim 4, Asano discloses that a protective layer may surround the alternate laminated body (see Figure 2).

Regarding claim 5, Asano discloses that the polymers with different refractive indexes of said alternate laminated body are designated as: polymer A as the polymer with the high refractive index and polymer B as the polymer with the low refractive index, (said polymer A)/(said polymer B) may be the combination of (polyethylene terephthalate having a metal sulfonate salt-containing dibasic acid component copolymerized at 0.3-10 mole percent with respect to the total dibasic acid component)/(polymethyl methacrylate with an acid value of 3 or greater) (see the paragraph bridging columns 6 and 7).

Regarding claim 8, Asano discloses that the identification marker may comprise, as an identifier, a portion wherein the optical interference fiber is used to construct a body of an identifiable size as a nonwoven, woven, knitted, embroidered fabric and/or paper (column 22, lines 14-21, column 25, lines 29-36, column 26, lines 1-45, column 28, lines 10-26, column 32, lines 44-59, and column 35, lines 17-25).

Regarding claim 9, Asano discloses that the fibrous body may be a mixture of different types of optical interference fibers having different wavelengths for interference light ranging from the infrared region to the ultraviolet region (column 22, lines 3-34 and column 27, lines 12-18).

***Claim Rejections - 35 USC § 103***

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/46815 to Asano as applied to claims 1, 3-5, 8 and 9 above, and further in view of US 2002/0016117 to Hamajima.

Asano does not appear to mention the fiber possessing an interior polymer layer, but Hamajima discloses that it is known in the optical interference fiber art to insert a 3-component polymer layer in the intermediate portion of an alternate laminate optical interference fiber as a reinforcing portion (see entire document including [0013], [0052] - [0055], and Figure 1(c)). It would have been obvious to one having ordinary skill in the art at the time the invention was made to insert a 3-component polymer layer in the intermediate portion of the alternate laminate optical interference fiber of Asano, as taught by Hamajima, because the intermediate section would reinforce the fiber.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/46815 to Asano in view of US 2002/0016117 to Hamajima as applied to claim 6 above, and further in view of USPN 4,419,479 to Springer.

Hamajima discloses that intermediate reinforcing polymer layer may comprise a polymer other than the polymer used to form the alternating layers ([0013]), but Hamajima does not appear to mention specific other polymers. Hamajima is silent with regards to specific other polymers, therefore, it would have been obvious to look to the prior art for conventional reinforcing polymers. Springer provides this conventional teaching showing that it is known in the reinforcing polymer art to include fine metal particles in any of a variety of reinforcing polymeric materials to provide the reinforcing polymer with superior abrasion resistance, temperature resistance, and/or impact strength (see entire document including column 1, lines 7-21, column 2, lines 6-10 and column 3, lines 33-59). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include fine metal particles in the reinforcing polymer, as taught by Springer, motivated by the expectation of successfully practicing the invention of Hamajima and because the reinforcing polymer layer would possess superior abrasion resistance, temperature resistance, and/or impact strength.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/46815 to Asano (as applied to claims 1, 3-5, 8 and 9 above).

Asano discloses that the identification target may have a colored or dyed section containing the optical interference fibers (column 32, lines 60-68). Asano also discloses that the fibers may be shortly cut staple fibers (column 34, lines 12-24). Asano does not appear to specifically mention ink-painting the fibers to form the color, but the examiner takes Official Notice that ink-painting is a known fiber coloring method. It would have been obvious to one having ordinary skill in the art at the time the invention was made to color the fibers by any known method, such as ink-painting, because it is within the general skill of a worker in the art to select a known method of coloring on the basis of its suitability and desired characteristics.

#### **(10) Response to Argument**

Claims 1, 3-5, 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 98/46815 (PCT/JP98/01667) to Asano.

Asano discloses optical interference fibers comprising an alternate laminated body obtained by laminating layers of polymers with different refractive indexes in an alternating fashion (column 1, lines 5-10). Asano discloses that the fibers may be formed in a woven fabric (column 26, line 1 through column 27, line 11) which corresponds to the currently claimed identifying marker. Asano discloses that the optical interference fibers may be the warp and/or weft fibers of the woven fabric (column 26, lines 1-14) woven in a plain weave (column 26, lines 38-45) which corresponds to the currently claimed optical interference fiber planar arranged and aligned in parallel limitation. Asano discloses that the fabric may be used as an emblem, wall

paper, or as a sticker (column 22, lines 30-34) which corresponds to the currently claimed use as an identification target attached to a product or service for identification of said product or service.

The appellant claims an intended use limitation wherein the identifying marker is identified by P polarized light and S polarized light from the portion of said planar arranged optical interference fibers where the P polarized light and S polarized light are observed by using a polarized plate for measurement of a wavelength and intensity curve of polarizing light passing through a slit of the polarizing plate oriented in the lengthwise direction of the optical interference fibers and a direction perpendicular thereto. Although Asano does not appear to specifically teach said intended use, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

The appellant asserts that the prior art structure is incapable of performing the intended use because the optical interference fibers of Asano are allegedly twisted. The appellant cites column 33, lines 14-18 and column 34, lines 25-36 of Asano which relate to non-woven fabric embodiments. The examiner respectfully disagrees. Although Asano discloses multiple embodiments wherein the optical interference fibers are twisted to permit observation of optical interference regardless of a viewing angle (see entire document including column 24, lines 46-50), Asano clearly discloses that the optical interference fibers supplied for weaving may be in a zero-twisted state or a twisted state (paragraph bridging columns 26 and 27). Therefore,

considering that Asano teaches an identifying marker that is substantially identical to the claimed identifying marker, it is inherently capable of performing the claimed intended use.

The appellant asserts that Asano fails to teach or suggest attaching the identifying marker as an identification target to a product or service. The examiner respectfully disagrees. Asano discloses that the fabric may be used as an emblem, wall paper, or as a sticker (column 22, lines 30-34). In addition, Asano discloses that the filaments may be fixed to the surface of an article using a resin (column 22, lines 42-52 and column 25, lines 57-67).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/46815 to Asano as applied to claims 1, 3-5, 8 and 9 above, and further in view of US 2002/0016117 to Hamajima.

The appellant does not separately argue claim 6.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/46815 to Asano in view of US 2002/0016117 to Hamajima as applied to claim 6 above, and further in view of USPN 4,419,479 to Springer.

The appellant does not separately argue claim 7.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/46815 to Asano (as applied to claims 1, 3-5, 8 and 9 above).

The appellant asserts that documentary evidence is required to support the official notice taken by the examiner that ink-painting is a known fiber coloring method. The examiner respectfully disagrees.

If appellant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697. To adequately traverse such a finding, appellant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241.

The official notice that ink-painting is a known fiber coloring method was first taken in the non-final office action mailed 3/9/2006 (page 7). The appellant did not traverse the official notice in the response filed 8/9/2006. The official notice was repeated in the final office action mailed 9/11/2006 (pages 6-7). The appellant did not traverse the official notice in the response filed 1/11/2007. The official notice was repeated a second time in the non-final office action mailed 3/23/2007 (page 7). The appellant did not traverse the official notice in the response filed 7/23/2007. The official notice was repeated a third time in the final office action mailed 4/10/2008 (page 7). In response, the appeal brief asserts that the rejection of claim 10 should be reversed but the appellant still fails to adequately traverse the official notice.

In summary, the appellant not only failed to adequately traverse said finding prior to the submission of the appeal brief the appellant failed to traverse said finding in the appeal brief.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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